

(c) incubating the cell culture at 30 to 40 °C for an appropriate period of time;

(d) removing the medium from the cell culture of step (c) and inoculating with seed virus;

(e) incubating the cell culture of step (d) at 25 to 40° C for an appropriate period of time;

(f) removing the medium followed by washing the cells once or more times and replacing the medium to form a cell culture of step (f);

(g) incubating the cell culture of step (f) at 25 to 40° C for an appropriate period of time;

(h) total or partial harvesting of culture supernatant containing virus with or without addition of a stabilizer;

(i) optionally, carrying out multiple harvests of virus containing medium, at any desired interval, by replacing the removed culture supernatant and re-incubating the culture for an appropriate period;

(j) optionally, removing cell debris and whole cells from the harvested virus containing medium or culture supernatant containing virus;

(l) optionally, virus inactivation and;

(m) storing the virus at -45°C or lower.

43. (new) <sup>The</sup> Process according to claim 42 wherein the cells are selected from the group consisting of chicken embryo cells and mammalian cells which are interferon-producing cells when submitted to viral infection.

44. (new) <sup>The</sup> Process according to claim 43 wherein the cells are selected from the group consisting of chicken embryo fibroblasts (CEF), chicken embryo cells (CE), human diploid fibroblasts (MRC-5), monkey kidney cells, fetal Rhesus lung (FRhL) cells.

45. (new) <sup>The</sup> Process according to claim 42 wherein the culture of cells is a primary or further passaged culture.

46. (new) Process according to claim 42 wherein the cell seeding is carried out at densities lower than  $2 \times 10^5$  cells/cm<sup>2</sup>.

47. (new) Process according to claim 46, wherein the cell seeding is carried out at densities in the range of  $1 \times 10^4$  -  $2 \times 10^5$  cells/cm<sup>2</sup>.

48. (new) Process according to claim 47, wherein the cell seeding is carried out at densities in the range of  $1 \times 10^4$  -  $1 \times 10^5$  cells/cm<sup>2</sup>.

49. (new) Process according to claim 47, wherein the culture is incubated, at each of steps e, g and i from 12 to 144 hours.

50. (new) Process according to claim 49, wherein the culture is incubated from 12 to 72 hours.

51. (new) Process according to claim 42, wherein a stabilizer is used at step h.

52. (new) Process according to claim 51, wherein the stabilizer is a substance acceptable as component in parenteral products and selected from the group consisting of human serum albumen (HSA), peptides, amino acids or proteins and mixtures thereof.

53. (new) Process according to claim 42 wherein the virus is a wild-type, attenuated or recombinant virus.

54. (new) Process according to claim 53, wherein the virus is a Flavivirus.

55. (new) Process according to claim 54 wherein the Flavivirus is Yellow Fever virus.

56. (new) Process according to claim 55 wherein the Flavivirus is an attenuated Yellow Fever virus.

57. (new) Process according to claim 56 wherein the Yellow Fever virus is the YF17D virus strain and/or substrains thereof.

58. (new) Process for the production of Flavivirus vaccine in cell cultures comprising the steps of:

(a) preparing a culture of cells which are permissive to the virus and acceptable as a substrate for vaccine production;

(b) suspending the cells in a suitable medium followed by cell seeding at low densities to form a cell culture;

(c) incubating the cell culture at 30 to 40 °C for an appropriate period of time;

(d) removing the medium from the cell culture of step (c) and inoculating with seed virus;

(e) incubating the cell culture of step (d) at 25 to 40° C for an appropriate period of time;

(f) removing the medium followed by washing the cells once or more times and replacing with a suitable medium to form a cell culture of step (f);

(g) incubating the cell culture of step (f) at 25 to 40° C for an appropriate period of time;

(h) total or partial harvesting of culture supernatant containing virus with or without addition of a stabilizer to form a separate vaccine composition;

(i) optionally, carrying out multiple harvests of virus containing medium to form separate vaccine compositions, at any desired interval, by replacing the removed culture supernatant and re-incubating the culture for an appropriate period;

(j) optionally, removing cell debris and whole cells from the harvested virus to form a separate vaccine composition;

(l) optionally, virus inactivation to form a separate vaccine composition and;

(m) optionally, lyophilizing the vaccine composition of steps h, i, j or l to obtain a freeze dry form of the vaccine composition.

59. (new) Process according to claim 58 wherein the cells are selected from the group consisting of chicken embryo cells and mammalian cells which are interferon-producing cells when submitted to viral infection.

60. (new) Process according to claim 59 wherein the cells are selected from the group consisting of chicken embryo fibroblasts (CEF), chicken embryo cells (CE), human diploid fibroblasts (MRC-5), monkey kidney cells, fetal Rhesus lung (FRhL) cells.

61. (new) Process according to claim 58 wherein the culture of cells is a primary or any further passaged culture.

62. (new) Process according to claim 58 wherein the cell seeding is carried out at densities lower than  $2 \times 10^5$  cells/cm<sup>2</sup>.

63. (new) Process according to claim 62 wherein the cell seeding is carried out at densities in the range of  $1 \times 10^4$  -  $1 \times 10^5$  cells/cm<sup>2</sup>.

64. (new) Process according to claim 63 wherein the cultures of each of steps e, g and i are incubated from 16 to 72 hours.

65. (new) Process according to claim 58 wherein a stabilizer is used in step h.